

BIOLOGICAL EVALUATION

COOPERATIVE GYPSY MOTH PROJECT

FOR

CENTRAL INDIANA

2007

Gypsy moth is moving into northeastern Indiana from the infestations in Michigan and Ohio. Gypsy Moth is also moving into central and southeastern Indiana from Ohio. Its movement is by natural spread and short distance transport by human activities. To detect the introduction of this pest, the State of Indiana has surveyed since 1972. From 1988 to 1998 the survey used a one-mile grid in the northern third of Indiana and a two-mile grid in the remainder of the state. In 1999, Indiana adopted the Slow-The-Spread (STS) survey protocol developed by the USDA Forest Service. Traps are set in detection (2K or 3K) and delimit (250M, 500M or 1K) grids across the state. The 2006 survey set 13,114 detection traps and 3,508 delimit traps.

The STS analysis of the 2006 trapping data identified potential problem areas in 5 counties in northern Indiana and 1 county in central Indiana (Map 1). The analysis identified higher or equivalent moth catches in delimiting survey grids placed at each site compared to detections and delimits in prior years. The STS analysis indicates that gypsy moth populations are stable or increasing in the potential problem areas and recommends action.

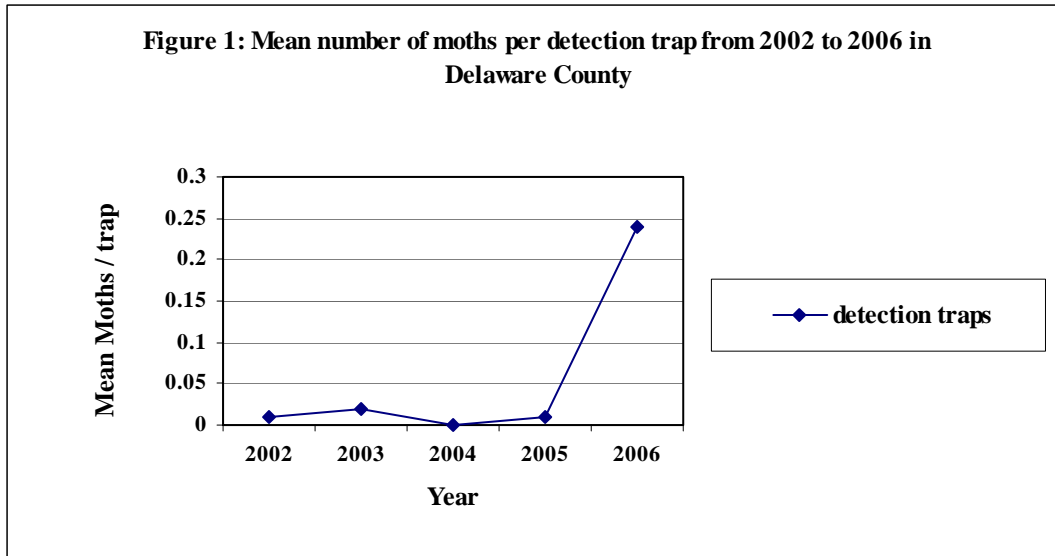
In Delaware County, the mean number of gypsy moths caught in detection traps increased from 2002 to 2006 (Table 1 & Figure 1). The increases in Delaware County are all due to gypsy moth catches from the proposed treatment site. This site has not been a prior treatment site and was first detected in 2006. High moth catches resulted in an egg mass survey of the site, during which several egg masses were found.

Map 2 and 3 show the number of gypsy moth detected in each county for 2006 and 2005, respectively. These maps indicate the introduction of gypsy moth into east central Indiana with Delaware County as the focal point of concern.

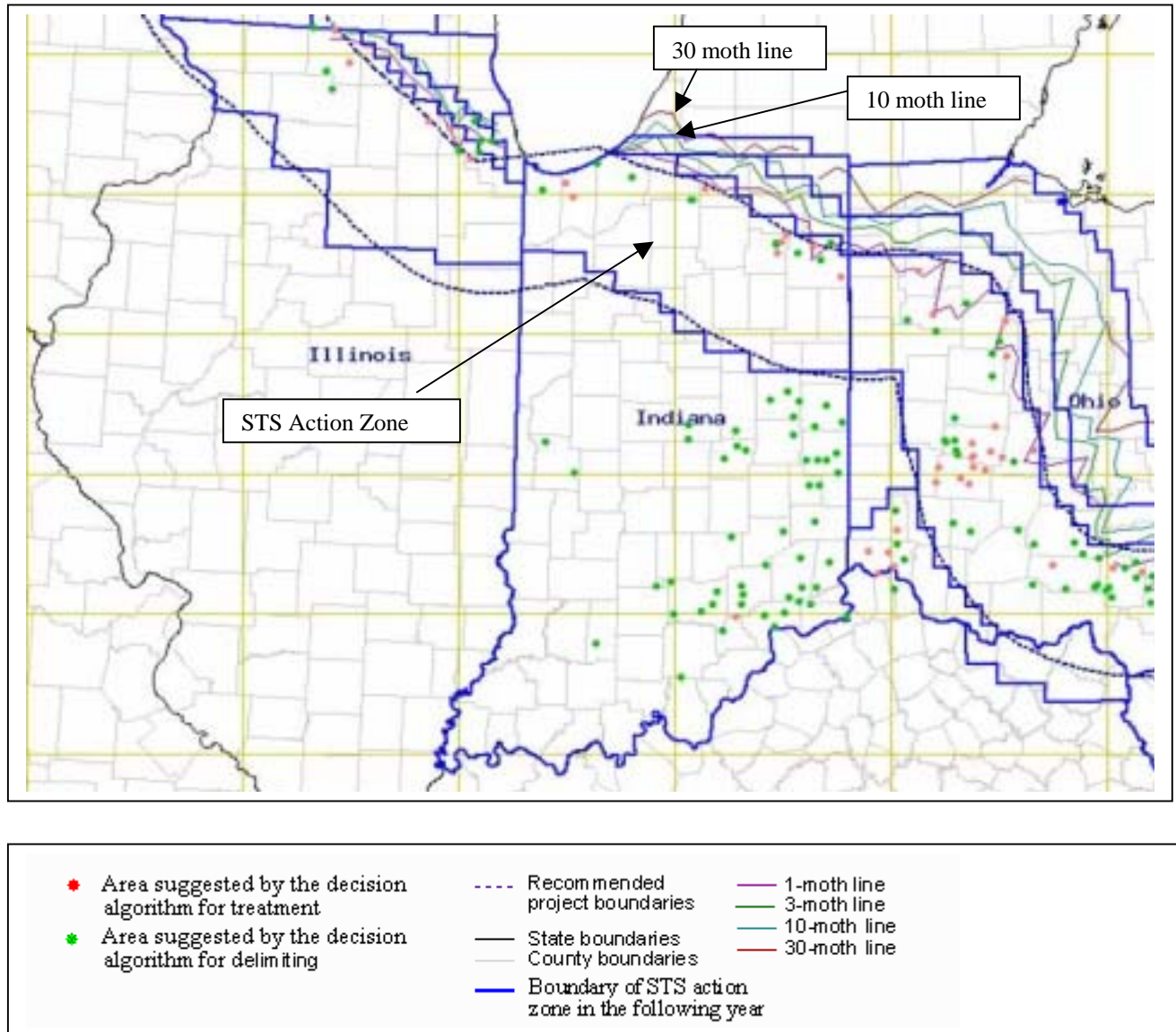
The site and moth trapping data can be viewed at the STS website - http://da.ento.vt.edu/Region2/t2007/IN_053-01.html

Table 1. Mean number of moths per detection trap in Delaware County for 2002 to 2006.

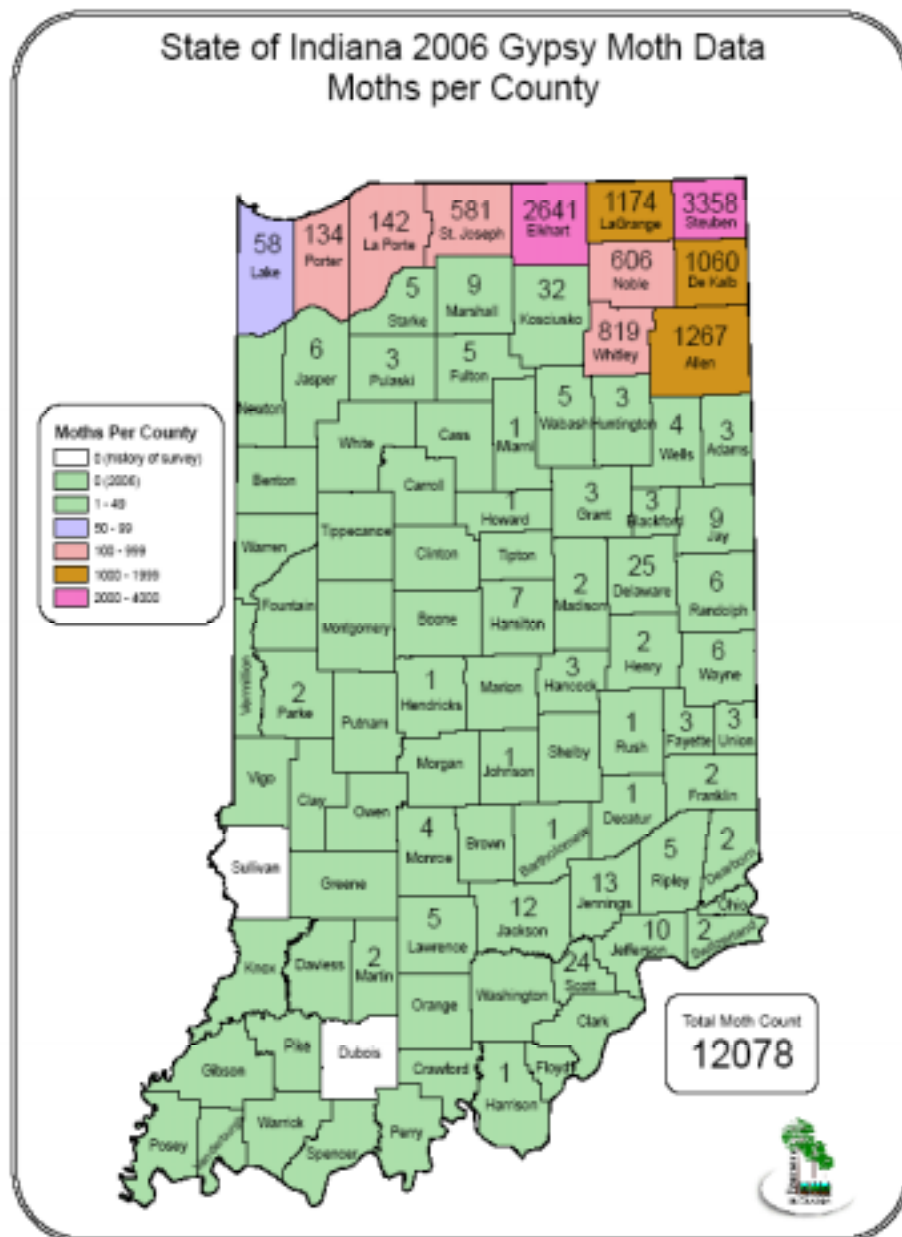
Trap type	2002	2003	2004	2005	2006
Detection	0.01	0.02	0.00	0.01	0.24



Map 1 Results of the 2006 Gypsy Moth survey showing potential problem areas by Slow-The-Spread analysis for Illinois, Indiana and Ohio (red dots indicate suggested treatments and green dots indicate suggested delimit survey).



MAP 2. Male moth catches by county for 2006.



MAP 3. Male moth catches by county for 2005.

